

Notice of Allowability	Application No.	Applicant(s)	
	10/601,044	ALLEN ET AL.	
	Examiner	Art Unit	
	Frederick F. Rosenberger	2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 9 January 2006.
2. ☒ The allowed claim(s) is/are 1,4,5,9,12,13,17-22,24,25,29 and 30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>1/5/06</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Amendment

1. Applicant's reply, filed 9 January 2006, has been received and entered. Accordingly, changes have been made to specification. Claims 1, 5, 9, 13, 21, and 22 have been amended. Claims 2, 3, 6-8, 10, 11, 14-16, 23, 26-28 have been withdrawn. No new claims have been added. Thus, claims 1, 4, 5, 9, 12, 13, 17-22, 24, 25, 29, and 30 are currently pending in this application.
2. The drawings were received on 9 January 2006. These drawings are acceptable.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark L. Lorbiecki on 15 March 2006.

The application has been amended as follows:

Claims 2-3, 6-8, 10-11, 14-16, 23, 26-28 (Cancelled)

Response to Arguments

4. Applicant's arguments, see page 11, filed 9 January 2006, with respect to the rejection of independent claims 1, 9, and 21 have been fully considered and are persuasive. The rejection of independent claims 1, 9, and 21 has been withdrawn.

Allowable Subject Matter

5. Claims 1, 4, 5, 9, 12, 13, 17-22, 24, 25, 29, and 30 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Independent claims 1 and 9 recite the limitation of a first wavelength range of $7\mu\text{m}$ to $8\mu\text{m}$ for determining a first total amount of reflected IR energy and a second wavelength range of $10.5\mu\text{m}$ to $12\mu\text{m}$ for determining a second total amount of reflected IR energy, wherein the difference between the two measured amounts is correlated with the amount of phosphoric acid anodize coating on an aluminum substrate. Independent claim 21 recites the limitation of a first wavelength range of $7\mu\text{m}$ to $8\mu\text{m}$ for determining a first total amount of reflected IR energy and a second wavelength greater than a roughness of the surface of the aluminum substrate for determining a second total amount of reflected IR energy, wherein the difference between the two measured amounts is correlated with the amount of phosphoric acid anodize coating on an aluminum substrate.

While prior art methods are known using the difference method at two different wavelengths to determine the amount of a layer on a substrate (see Carduner et al., Sharkins et al.), the prior art is silent with regards to the claimed wavelength ranges and the claimed materials. As applicant points out in the original disclosure, such wavelength ranges are chosen based on the surface roughness of the substrate and the absorbance ranges of the coating so as to discriminate between a reduction in reflectivity based on the absorbance of the coating and a reduction in reflectivity based on the surface roughness of the substrate (see pages 6 and 9). The cited prior art methods select wavelength ranges based on absorbance ranges of the coating only.

As such, applicant's disclosure provides a novel and nonobvious improvement over the prior art. Accordingly, claims 1, 9, 21 and their associated dependent claims are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shelley et al. (US Patent # 6,784,431) is assigned to the present assignee and discloses a non-destructive method of measuring anodize coating using IR absorbance. This measurement is performed at a single wavelength.

Shelley et al. (US Patent # 6,906,327) is assigned to the present assignee and discloses a non-destructive method of measuring the amount of a cured coating using IR absorbance.


Shelley et al. (US Patent # 6,903,339) is assigned to the present assignee and discloses a non-destructive method of measuring an opaque coating using IR absorbance.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick F. Rosenberger whose telephone number is 571-272-6107. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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